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PHILADELPHIA

SOCIAL SCIENCE ASSOCIATION.

CHAIRS OF PEDAGOGICS

IN OUR

UNIVERSITIES.

A DISCUSSION

OF THE

SCIENCE AND ART OF EDUCATION

AS

UNIVERSITY DISCIPLINES.

BY

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Published by the

PHILADELPHIA SOCIAL SCIENCE ASSOCIATION,

720 Locust Street, Philadelphia.

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Chairs of Pedagogics
in our
Universities.

Among the interesting phenomena connected with American education of the last thirty years none are more striking than the expansion of the college and the change in the character of its work. A generation ago the college offered to its students only one prescribed course of study in which Classics and Mathematics formed the chief constituents. These subjects were supplemented by a little elementary instruction in natural science and a taste of moral science and history. There was no recognition of the desirability of consulting different tastes among the students, or of encouraging devotion to any branches of study except those which formed the staples of the curriculum. So many hours each week were devoted in the Freshman year to Latin, so many to Greek, so many to Mathematics. The Sophomore year was a continuation of the Freshman year. In the Junior year a little attention was given to History, Physics and possibly Chemistry; while in the Senior year a few hours were given to Political Economy, Philosophy, Ethics and Constitutional Law. All the students took the same number of hours in each subject.

The present curriculum is very different from the former in all institutions, which have been enabled by the possession of pecuniary resources to advance. The great difference may be made clear by comparing the present curriculum of the institution, which has carried through these changes most consistently with the one in existence a generation ago. Harvard College, although not the first to begin this reform, nor successful in her first attempts to introduce it, has by a series of happy coincidences taken her place at the very head of the column and stands to-day by universal consent at the head of American institutions,

so far as number of different branches taught in its curriculum and the number of courses offered in each branch is concerned.

This will appear more clearly by a brief comparison of one of its late announcements with the typical course. The following subjects were represented in the college by different courses, aggregating the number of exercises per week indicated by the figures following each subject:—

Hebrew, 6; Aramaic, 2; Assyrian, 6; Arabic, 4; Ethiopic, 2; Sanskrit, 8; Old Iranian, 2; Greek, 40; Latin, 40; English, 29; German, 24; French, 26; Italian, 10; Spanish, 12; Philosophy, 30; Political Economy, 17; History, 45; Roman Law, 6; Fine Arts, 17; Music, 13; Mathematics, 38; Physics, 21; Chemistry, 23; Natural History, 50; total, 471.

The typical college has something like the following:— Greek, 11; Latin, 11; Mathematics, 12; History, 5; Physics, 4; Natural History, 2; French, 3; German, 3; Political Economy, 3; Political Science, Ethics, &c., 3; Philosophy and Logic, 3; total, 60. That is, Harvard College offers nearly eight times as many exercises per week in the various branches of human science as the ordinary classical college.*

Important as this change in the number of subjects of instruction has been for our college system, it is no more important than another change intimately related to it though quite different in character, and that is the revolution in the kind of teaching afforded in each of the leading subjects. This difference is much greater than one would infer from a mere contemplation of the subjects announced in the catalogues. Even thirty years ago, for example, the subject of Political Economy was included in nearly all the college curricula of the country. But it was at that time taught by the president of the college, usually a clergyman, whose time was fully occupied by other duties, and whose attitude toward such topics was hopelessly biased by the fact of his theological education and profession. To-day it is taught in our better institutions by men who have made a specialty of social and economic topics, and

* Of course, this could not be done satisfactorily without an elective system of some sort—either elective study, elective course, or elective group system, under which each student takes no greater number of hours per week than under the old plan, but has a much wider range of choice in the selection of his subjects.

whose whole time and attention are devoted to this department of investigation. More than that, where thirty years ago, one short course of perhaps forty to fifty exercises was considered sufficient, to-day, no college of any size is satisfied unless it can, at least, double or triple these opportunities, and several of the centers offer a number of courses, each of which has more exercises than were formerly offered in the whole curriculum. The same thing is true of other subjects, so that we can fairly say, that the teaching of such subjects was formerly tutorial merely, and given by men who were qualified in that subject only for a tutor's work, while to-day it is professional and given by experts in the various subjects. This difference is vast, and signifies a total revolution in the spirit and results of college work.

This development, significant and far reaching as it is, has, however, not been symmetrical. It has gone on in an almost accidental way. The subjects which have received the most careful attention have been in many cases those far removed, relatively speaking, from the immediate demands of our national life. Thus, the subject of Assyriology, than which it would be difficult to find one more remote from all our practical interests, speaking in a narrow sense, has received such an impetus, that an American student can now find as good opportunities for its study at home as abroad, and very much better advantages than in most other countries. On the other hand, the subject of Political and Social Science has received only inadequate recognition, considering their vital importance to our political and social development. The reason for this is not far to seek. Our higher educational institutions are, to a large extent, in the hands of private parties, who are bound in their management of the institution by many an old provision of a will, or by strong corporate or individual interests. They are dependent for their resources upon private beneficence for the means of carrying on their work at all. Every individual, therefore, who imagines that he knows what the educational interests of the time demand and who has a sum of money at his command, may practically determine the whole course of an institution by giving the money, on condition that it be used in a definite manner to promote a

definite subject or subjects. The universities are, therefore, rarely in a position to pay much attention to symmetrical development, with a due regard to the wider interests of the community. It is rather a wonder, under the circumstances, that their curricula are as symmetrical as they are.

This circumstance makes it necessary, that from time to time we should canvass our institutions and our national needs, and ascertain whether the former are answering the latter to as full an extent as possible. If it appears that in this accidental process of development we are leaving great gaps, then it is our duty to call attention to this fact, and urge upon the directors of our institutions and upon the benefactors of the public, the necessity of remedying such defects by timely action.

Prominent among the subjects which are fundamentally important to our national welfare, and yet, which are almost entirely neglected by our higher institutions, is Education in its historical, scientific, and practical aspects. It is the purpose of the present paper to investigate the relation of this branch of inquiry to the country at large, to the teaching profession, and to the higher institutions of learning themselves.*

If we examine our national institutions and arrange them in order of their importance to national welfare, we shall certainly put high in the list those pertaining to the training and education of the people. The work of education itself is, of course, of fundamental importance to national welfare, since it is one of the most important means of transmitting to the next generation the heritage of culture, which we have received from our predecessors. It is the means by which the continuity of progress is preserved. Accordingly as it is well or ill done is the basis of all future progress maintained. It is moreover, the means by which each successive generation is made more worthy than the preceding, to take up and carry on the work of furthering civilization in every department.†

The work of education determines whether the individuals upon whom will shortly rest the burden of managing the world's

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* See note I, Appendix.

†Cp. Spencer on Education.

affairs shall be properly prepared for their task, and consequently, whether the sacrifices which all preceding generations have made for this end shall be crowned with legitimate fruit. Surely a subject of this importance can not receive too much attention from those who are interested in the progress of the race.

But the subject is of special importance to the welfare and existence of the institutions of education themselves. It is surely proper that a set of institutions which exist solely for the purpose of promoting education should encourage and develope the science of education itself and the art which rests upon it. It is surely fitting that they should devote time and effort to collecting all the information on this subject which is obtainable; that they should investigate everything which pertains to the proper ends and means of this very work in which they are engaged. One would suppose that they would, as a matter, of course, take care that this department of human learning so immediately relating to themselves should be adequately protected and fostered.

The subject is important in a special sense to a large and growing class in the community, viz., the individuals who carry on the actual work of instruction in our educational institutions of all grades from the lowest to the highest. It is surely to their interest that everything should be done to promote the advance of human science in a field where their whole interest is concentrated; that they should favor every plan which promises to increase our knowledge of the human mind in its relations to training, of the methods of reaching desired results and of the proper kind of results to reach.

When, however, we actually examine the existing institutions, we shall find that little or nothing has been done to foster and promote this branch of human learning, in spite of its importance in these various respects. In spite of the fact, that we have some 300,000 teachers in this country whose success, tested by any proper standard, depends on the fullest and completest knowledge of principles and practice in this field; in spite of the fact, that we have nearly four hundred higher institutions of various kinds engaged in turning out such

teachers for this work; in spite of the fact, that the public is paying hundreds of millions of dollars in order to have this work of education carried on by these teachers, and that it is therefore vitally interested in their knowing everything possible about this subject, the truth remains, that in this whole country there is no centre adequately equipped for the purpose of fostering and promoting this great department of human science and art. In the case of most of our large institutions the subject is not even mentioned in any part of their announcements. This is exceedingly noticeable in regard to Harvard College, where they seem to have thought of almost everything else, but pass over this branch of learning entirely.

This state of things which may be explained, though it can hardly be justified, will he touched upon again in another part of the paper.

In our opinion, the time has fully come, when the subject of education in its historical, scientific and practical aspects, should find a place in the curricula of our higher institutions of learning. This claim is made on a three-fold basis. It is, in the first place, one of the prime functions of the University as such, to contribnte as far as possible to the advance of human science in every department of life.* The study of this subject affords, moreover, a liberal training, as surely as the study of many of the recognized constitutents of our present curricula, and as such, deserves a place by the side of other elements of a liberal education. And, finally, the practical results which would flow from such incorporation are many and great.

We are coming more and more in this country to recognize what is a commonplace in all other civilized lands, that the higher institutions of learning do not exist, merely in order to transmit hereditary intellectual possessions of one generation to the next; not merely to train the rising generation in existing science and art, but also, and quite as much for the purpose of furthering science itself. Experience has shown, that in order to secure adequate attention to any great branch of science, even in the best of these institutions, it is necessary to recognize it as a proper subject of university work, by establishing professor-

* See Note II., Appendix.

ships, whose incumbents have the duty of promoting by original investigations in every direction the subjects which they represent. It is in this way, that that mangificent system of higher institutions, the German Universities, have gained the leading place in the education of the world. It is, in a word, the wise endowment of research in connection with a practical recognition of the value of such studies which has produced this remarkable result. Other universities are following this feature, which, although it did not originate in Germany, has found there its best modern exemplification. We recognize now, that if a number of professorships are established in any department of learning and properly filled by suitable men, the result can not fail to be a great widening of our range of knowledge along such lines of investigation. When we can count thirty or forty professors of the Science and Art of Education in our American Universities, we may be sure that these disciplines will be greatly advanced, and that the professors will discover and elaborate much which will be of great value from a scientific, as well as a practical point of view. It is believed, moreover, that in such a country as ours, where the division of labor is carried through so thoroughly, this is the only method which will ensure the regular and rapid advance of human science in this department.

But as it is, we have already a number of contributions to the science of education, the study of which can not but result in the same sort of liberal training, which is produced by the pursuit of any other branch of speculative thought or institutional history. In such Colleges as Harvard, Michigan, Cornell, Johns Hopkins, Pennsylvania, Yale and many others, it is recognized by the adoption of a partial or complete elective system for the degree of A.B., that the value of any study so accepted is about equal to that of any other in the course of liberal training. Now, the subject which is called the science of education, though still very limited, and made up for the most part of disputed propositions, is of the same character as any other branch of the philosophic or moral sciences, and if pursued, even in its present form, would give the same kind of discipline. The study of educational theories is a branch of the history of

philosophy, while the history of educational institutions and processes and methods is also a branch, and a very important one, of institutional history. Education can lay claim to the same sort of treatment accorded to these subjects on its own intrinsic merits as a branch of liberal training. It should be included, therefore, as a branch of study in every college which has adopted the elective system of studies leading to a liberal degree.

It is, moreover, fitting, that the college and university should afford opportunities for this kind of work, since they are the great trainers of our teachers. Even in the State of New York, which has, perhaps, provided on the whole, the best opportunities for such education as may be gained outside of a college, three-fourths of the principals of academies are graduates of college. Fully one-third, if not one half of all the graduates of the colleges of this country teach for a longer or shorter period after graduating.* The colleges and universities recruit their teaching force almost exclusively from the ranks of college men, and they should furnish facilities for these men to prepare themselves for their work.†

Finally, the subject of education should be included as a constituent part of the curriculum of our higher institutions of learning, on account of the great practical advantages which would flow from such a step. It would contribute more than any other one thing to an improvement of our educational system. It would do this in several ways. As already noted, it would tend to increase our knowledge of educational science and art, so that all teachers who cared to do so could improve their work by applying this increased knowledge. To those teachers who desired to prepare themselves professionally for their work, it would afford opportunities which do not exist at present. By affording these opportunities, it would tend to beget a desire for this sort of professional training, which could not but result in a great increase in the number of those teachers who would thus seek to prepare themselves better for their work; and in this

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* Cp. Normal Instruction in Colleges, Edward North, University of New York. Regent's Report, 1869, p. 701.

† Cp. Note II., Appendix.

way a professional spirit would grow up, which would produce the most beneficial effect in raising the character of the average teacher. In other words, the universities would contribute a very important service in offering to the teachers of the country a professional training for their future careers.

The possibility of establishing in the universities a course of study in the science and art of education, which would be of aid to future teachers in preparing themselves for their work has been much discussed of late both at home and abroad. It is my firm conviction, after carefully following this discussion as far as I have been able to inform myself from actual observation and from the literature concerning it, that those who have maintained that such a course could and should be established have made out their case clearly and conclusively.

The need of improvement in our teaching is, I think, apparent, and is generally conceded. If we confine our attention in the first instance, to the domain of so-called secondary education, we shall have to admit, I think, that most of the teaching done in this field is of a very low grade. Certainly, no one who has passed through the different forms of one of our preparatory schools, high schools, or academies, and who is endowed with a reflective turn of mind can resist the conviction that the great majority of the men and women who were entrusted with the task of training him were unskilled laborers in this most important of fields.

The explanation of this fact in the case of many of the teachers is easy. They are too young and too inexperienced to be very successful in their work. But even in the case of those who have been engaged in teaching for years, the majority of them would be classed under the rubric of very moderate or very poor teachers. The case is in nowise different in the colleges. A very large percentage of the men engaged in the work of college instruction are inefficient. Surely there is great need of trying everything which promises to assist in remedying this great evil.

The most striking fact relating to this condition of things is the circumstance that in this whole department there is almost absolutely no trace of requiring any previous special

training for the work of education. In the case of a physician the community demands that he shall have attended some special school organized for the particular purpose of training those who wish to practice medicine. We insist that he shall have the certificate of a body of specialists that he has given some study and attention to the bodies of the patients upon which he practices, that he shall have studied the nature and qualities of the drugs which he proposes to give, and that he shall have begun his practice under the eye of a trained specialist, and thus acquire some skill before he may go out and set himself up as a physician. The same thing is true of the dentists and apothecaries. We refuse to entrust even our teeth to the care of any one who has not taken a course of special training under competent authorities. Nay even the men who wish to practice upon animals, even our cat and dog doctors, must first prove that they have spent two or three years in studying all that is known of cat and dog treatment before we give them *carte blanche* in treating our useful or ornamental animals. It is only in the case of those who are to undertake the treatment of the minds of our children of whom we demand absolutely no evidence of skill. Socrates accused the Athenians justly of exercising more discrimination in the selection of the trainers for their horses and cows than of the trainers for their children. Since Socrates' time we have made great improvements in the selection of the trainers of our animals, but we are still on the level of the Athenians so far as selecting teachers for our own children is concerned.

It is not only true that we have no special institutions whose chief object is the preparation of teachers for this grade of instruction, but there are few courses in connection with existing institutions which have for their purpose this peculiar training suitable for the future teacher. Nor is this by any means a full statement of the case. When we come to examine the system of appointing teachers we shall find that no requirement is made in such schools that the candidates seeking appointment shall know anything about the subject of education in general or the teaching of the particular branches he will take up, beyond that minimum which he must necessarily have absorbed in com-

mon with every educated man in connection with his own educational course or, possibly, that practical and empirical acquaintance which it is presumed he must have obtained if he has actually taught for a longer or shorter period. Nor is this all. If we go into the schools themselves and inquire of the actual teachers who are conducting the work how much time and attention they may have given to the study and investigation, we will not say, of educational problems in general, but of the special and particular problems connected with the branches they are teaching, we shall be amazed at the ignorance displayed by the average teacher in such schools in regard to many of the fundamental questions relating to his work. He knows little or nothing of what his colleagues are doing in the same line in other places, what experiments they are trying, what results they are attaining, what ideals they have before them and by what methods they are working towards them. He knows, if possible, still less about what his predecessors did in the same field before he entered it. He has never given any time or attention to the history of teaching in his branch. He knows nothing of the experience of the race in that department though it may be a recorded one dating back 2,500 years. In other words, he is going it alone without any reference to the success or failure of the thousands who may have traveled the same road before.

Not only is he ignorant of the thought and experience of the race in the field in which he is at work, but he has never even given any considerable reflection on his own account to the work he is doing. He has no well defined idea as to the educational purposes and objects of the branch which he is teaching, or as to the wisdom or unwisdom of the methods which he adopts. In a word, nearly every element which is a distinctively characteristic result of professional training is lacking, not only in the candidates for such positions, but in large numbers of the present incumbents.

A striking confirmation of this view is to be found in the class of considerations which determine the appointment to positions in our secondary schools and colleges. Leaving out the cases, which are unfortunately too numerous, where personal

considerations are the decisive element, let us take an instance where the determination exists to select the best men who can be obtained. What are the questions asked in regard to the candidate? Suppose it is a position to teach mathematics in a high school, preparatory school or college. Is he a graduate of a college? Has he taught? Did he succeed in his teaching? Has he had a special course in mathematics? Can he manage the boys? If you can answer these questions in the affirmative you are perfectly content—greatly rejoiced, in fact, since a man who can fill this bill and will take the remuneration offered is a *avis rara*. And yet, even in this case, there is no trace of a requirement that the candidate shall have had in any peculiar sense a professional education. Scholarship and a knack of getting along with the boys are the two things sought. No question as to whether the candidate knows anything of the most improved existing methods of teaching his subject; no question as to whether he knows anything of the experience of the great army of mathematical teachers who have preceded him; no question as to whether he has studied the opinions of the great thinkers as to the peculiar educational function of his special branches, or as to their relation to other branches, and their consequent position in a liberal or technical curriculum—in a word, no question which would indicate that this man is going into the department of teaching this subject rather than into any one of numerous occupations where a knowledge of mathematics might be useful to him. The very most that is required is "successful experience in teaching," which means simply, under ordinary conditions, ability to manage a class of boys or young men so that they will observe reasonable order during the class room hour. Ordinarily we are content, as we must be, with the assurance of a very moderate amount of scholarship.

In other words, we do not recognize in this department of education the desirability of a professional training as distinct from a mere knowledge of the subject-matter of teaching, or from empirical experience in the class room. It is as if we were to be content in the case of the civil engineer with a knowledge of mathematics, or in the case of a physician with a knowledge of *materia medica*.

This is not true of all departments of education. There is in the field of so-called elementary education a growing recognition of the desirability of some sort of professional training, as is demonstrated by the rapidly increasing number of normal schools. We would not maintain that these schools have done all that was expected of them by the enthusiastic men who labored for their introduction into this country, nor can we admit all their advocates claim for them as they actually exist in this country to-day; nor can we allow that even under more favorable circumstances they could achieve what certain educators claim for them. But we must admit that they have contributed powerfully to improve the condition of elementary schools in all countries where they have been properly organized and managed, and that this advantage has come chiefly from the circumstance that they recognize the necessity and possibility of some kind of professional training for those who expect to teach in our elementary schools.*

The field of the normal schools, however, at the best is extremely limited, and it is simply impossible that they should ever furnish the kind of training in education which must be given if we are to improve our educational system rapidly and continuously. They do not make many or valuable contributions to the science of education, and we cannot expect it of them under present conditions, or indeed, under any conditions which are likely to be realized for generations to come. They do serve as valuable distributing reservoirs of the science and art, which are evolved elsewhere, and we can not now do without them any more than we can allow ourselves to remain dependent upon them for the training in educational art and science which teachers in other fields require.

It is a curious circumstance that the recognition of the necessity of some sort of professional training is characteristic of Elementary education, while in the domain of secondary and higher education there is scarcely a trace of it.

It seems to me that the explanation is to be found in three facts. The great advance in this respect in elementary education is due chiefly to a historical accident. When the work of

* See Note IV., Appendix.

developing elementary schools was finally taken up in earnest the demand for teachers immediately outran the supply. It was simply impossible to get a sufficient number of persons who possessed the requisite scholarship to teach even the three R's. The recognition of this fact was followed by the establishment of schools for the education of teachers. The work, in the first instance, was nearly entirely academic in character, *i. e.*, it was confined to the teaching of the subject-matter alone, and a large majority of our so-called normal schools in this country are still in this stage, *i. e.*, they are nothing but academies, even where they pretend to be something more. But the possibility and desirability of developing a professional training in conneetion with such schools soon became evident. As a result, there was a thorough going and in some cases a rapid revolution and evolution, and the professional school emerged from the academy. Our best normal schools can now fairly be called professional schools, for even where they keep the academic work and instruct in all the branches taught in our common schools, as most of them do, the whole instruction has a professional character and is given with reference to the fact that the pupil is to become a teacher in these and similar branches.

The history of higher and secondary education has been, on the contrary, a very different one. Our colleges and universities have always sent out more men with a moderate degree of scholarship and a willingness to teach than could find places in our schools and colleges. As a consequence, the public has never felt the necessity of special institutions to impart the required degree of scholarship, and as the teachers acquired their education in an institution which existed as much for the future lawyer, doctor, clergyman and merchant as for the teacher, it was undesirable and impossible to shape the instruction for the special benefit of the last class.

In these two facts then lie, I believe, the explanation of the origin of the present condition in regard to this question. Its continuance is owing to conservatism and to the general prevalence of what must be regarded as a perniciously false idea that a thorough knowledge of the subject-matter of teaching is a sufficient preparation for a teacher's work.

While, therefore, the present state of things can be easily explained, it can not be so easily justified. There is the same inefficiency in our secondary and higher work which formerly existed in every branch of elementary education. It is due in part to the same cause, viz.: lack of acquaintance with educational literature and educational experience. It may be largely remedied by similar means, viz.: the professional training of the candidate in the science and art of education before he may enter the work. We suffer at present on the one hand from the inexperience of the beginner, the evil effects of which may be greatly reduced by calling his attention, before he begins his work, to the pitfalls which lie on every side of him, by presenting to him the results of educational experience and thought, as to the significance from a general and a special point of view of the branches he is going to teach and the methods with which the great and small educators of the world have tried to accomplish what they considered desirable ends. We suffer on the other hand from the experience of the routinist, who, having begun his work with no acquaintance with the problems or history of education has continued it, one might almost say, as a handicraft, with no desire to know what others are doing or have done, are thinking or have thought on the work in which he is engaged. He would have been a very different teacher had he begun his career with an appreciation of the importance and success of his work, with the knowledge of its relation to the past and the present, and under the influence of the *esprit de corps* which ever springs from a consciousness of being a part of a learned professional body.

The professional training of teachers for our higher schools and colleges is as necessary as the professional training of elementary teachers.* This will appear, I think, from the following consideration :

The problems of secondary education, *i. e.*, of education in our secondary schools are, for a part of the course, exactly the same as those of the so-called elementary education. The term secondary school we apply to those which fit for colleges and universities. Now very many such schools take the boys

* See Note V., Appendix.

and girls at an early age, usually at ten years and often younger. Of course, in the case of such pupils the pedagogical problems are exactly the same, somewhat modified, it is true, in some instances by the studies pursued. If one set of teachers profit by a professional training in work of this grade, it is reasonable to suppose that the other must do so, too.

Again, the problem of secondary education in those grades above the lowest—say in the three years immediately preceding the college—although not exactly the same, are quite as broad, complicated aud difficult as those in the lower grades. In some respects, indeed, from a practical point of view they are more difficult, since in the case of the latter, one knotty question. viz.: what branches should be studied is in a large part decisively determined by the practical demands of our modern life and the subsequent course of study. Reading, writing, and arithmetic must be largely studied in the early years.

In the third place the pedagogical questions of the college are in many respects similar to those in the upper grades of the preparatory schools. In the average college, indeed, with a prescribed course and text-book study, there is but little difference in the problems of instruction except those growing out of the age of the pupil. A foreigner in passing from the highest form of a preparatory school to the freshman class of an ordinary college would notice but little if any difference either in subject or method in the instruction of good tcachers.

Finally, the larger pedagogical problems which are decided in our college and university faculties relating to subjects of admission, methods of examination, system of electives, are such as imperatively demand for their proper decision that thorough acquaintance with the problems of education, their genesis, development and solution which if general, can only be the accompaniment of a course of professional instruction which shall embrace all who wish to teach.

So much for the importance of the problems involved. The necessity of some preparation on the part of those who are to settle these problems, either theoretically or practically, follows almost as a matter of course.

Logically speaking, there are several ways in which this might be done. The State might demand, as Adam Smith

proposed in speaking of a similar topic, that all candidates for positions in our higher schools and colleges should pass a State examination in the science of education, educational history, biographical, institutional and methodical, leaving the individuals to get the necessary instruction where they can, trusting to individual energy to organize schools for this work as a business enterprise. All educational history, however, shows that such a scheme is unsatisfactory. No high degree of acquirement can be demanded as a matter of fact. The State might, however, establish in addition, special post-graduate schools, whither graduates of college might go and get this special training prior to beginning the work of teaching. The Government of Prussia has done this to some extent, and although the experiment seems moderately successful, yet, it has never been tried on a sufficiently large scale to decide its practicability.* The State might also establish courses in the science and art of education, in connection with the existing schools for higher instruction, and require all candidates for such positions to pass an examination in such courses. This is what Germany has done on a large scale, and the result is, that Germany leads the world in educational matters, the German literature on educational topics being equal in value to that of all other countries. Scotland has also done something in this line. These plans in their entirety we can certainly not adopt here at present. It would be, politically speaking, impossible to require our private colleges to limit their appointments to those who had passed such a State examination. Some of our State institutions in the West, have began the work by establishing courses of this kind, though they have few or no special privileges for students who have completed them.

Another method, and one which is practicable here and in thorough sympathy with our American way of doing things, is for our existing colleges and universities to establish such courses, make them thoroughly efficient, and then trust to the growing insight of the public and of teachers themselves to beget a public sentiment which would make their completion a necessary part of every teacher's equipment.

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* See Appendix. Note VI.

A great advantage of this last method lies in the fact, that the teachers in acquiring their professional training would be subject to the liberalizing influences of a great centre of culture, and would thus avoid that narrowness which too often characterizes those who are trained to a specific calling in special schools which have no connection with liberal departments.*

One of the chief practical advantages of such a development, as noted above, would be its tendency to make the calling of teacher a profession. Our schools are to-day, speaking generally, taught by men and women who have no idea of remaining in the work any longer than they can help. The majority of teachers in all grades from the ungraded country schools to the college are teachers, so to speak from necessity. They are women waiting to get married, young men waiting until they can get money enough to go to the Law or Medical School, or finish their theological course or become dentists or veterinary surgeons—anything, in fact, except teachers. The average life of the teacher in the United States, taking in all classes, is not over four years at the outside. An examination into the educational condition of the great State of Illinois, showed that the average public school teacher did not continue in the work above three years. Even the superintendents of city school systems, presidents and professors of high schools and principals of ward schools, were only teaching until they could find something else to do.

The reason for this state of things is, of course, a very complex one. It can not be sought in one circumstance. A very important ground is to be found in the fact, that the pecuniary inducements are so low, compared with those offered in other professions. But after making all allowances, one of the most important reasons is to be sought in the fact, that the great majority of teachers, especially in our secondary schools and colleges have really never become interested in the scientific aspects of their work. It is simple, bald handicraft, with no touch of the ideal or scientific in any of its aspects. They have no notion of the great and increasing literature on

* See Appendix. Note VII.

the subjects they are teaching. They have never been called to look at the relations of their field of work to other important departments of human science and art. They are ignorant of the grand opportunity for scientific work of the highest type. Now, the establishment of such courses of instruction would do this very service. Men, whose attention were attracted to the subject, would spend longer time in preparing themselves for the work, and having prepared themselves specially they would be much slower in grasping at some other calling at the first opportunity. The recognition of the better class of work would lead to an increase in the salaries of the teachers themselves, and thus in a double way would the tendency to develope a profession be strengthened. The common contempt which attaches to the idea of the teacher, it must be confessed, is justified by the work of the teachers themselves. An intelligent community can but attach a stigma to work of any sort which is absolutely unskilled. And of this character, is much, if not most of the teaching done in our country.

It is not merely the acquirement of a professional training which improves the character of the rank and file of the followers of a calling; but the persistence in the calling, which the acquirement of such training favors, tends to raise the general level of skill. It is from this point of view that such courses of training in the universities promise much benefit to the teaching calling.

Even if this result should not appear in its full extent, yet marked advantages would flow from such courses. We have already in this country scores and hundreds of teachers who, since they are in the work, earnestly desire to improve it in every way possible. Many have followed the calling for a long term of years. They are thoroughly alive and energetic and wish to keep abreast of what is doing in other places and countries. Few of them have such a knowledge of foreign languages as would enable them to profit very much by trying to read publications in those languages on such topics. Now how can they get this information? They wish to study the science and history of education. They would like to know the educational problems of other times and the methods which

were adopted to solve them, since, by a comparative study only can they hope to get clear ideas as to real essentials of education and be brought to distinguish between the necessary and the accidental. They wish assistance and encouragement from men who are thoroughly familiar with this field and have made it the study of their lives. Now, where shall they go to get this sort of aid? To our sorrow be it said that there is no place this side of the Allegheny mountains where anything valuable of any considerable extent is offered to them. Nor is there, east or west, any place where facilities for the study of the art and science of education are provided to anything like the same extent as for the study of physics or history or chemistry in very many centers.

Even if no others were reached it would be ample return for such an outlay of money if only this class could be aided in their efforts for improvement. There are, moreover, in every community, and fortunately for us their numbers are large in this country, some persons who choose this department of work because they would rather teach than do anything else in the world. These are the people from whose conscientious devotion to duty we have to promise ourselves most in the way of actual improvement of the science and art of education. They should have every facility for properly preparing themselves for this great work. In no other way can adequate facilities be offered them.

Consider for a moment the magnitude of the mere money interests involved. The cities of this country, for example, are expending millions and millions of dollars in schemes of public education. Where do they get the men to guide and direct the work of organizing this magnificent machinery? They are at present men who amidst many difficulties of work and limited means have done their best to learn something of the problems and methods of education. Usually they are men who have had no opportunities to learn anything of the subject except what they could snatch up in the midst of a busy life. Is it any wonder that many mistakes are made? That the same mistakes are made again and again which have been made in countless numbers of cases before them, and which might have

been avoided by the possession of a little knowledge of the experience of the world in other places and times?

What courses then relating to this subject could and ought to be given in connection with the universities?

It is possible in all our larger colleges to give such courses as one professor could conduct. They would include lectures upon the science of education, upon the history of speculative thought in this department, and upon the classical writers and thinkers in this field. The history of educational institutions should also receive attention. The practical aspects of the subject should not be neglected. The description, history and discussion of methods of teaching, the plans of organizing and conducting schools and school systems, and other matters relating to practical aspects of the subject should be fully treated. In a few centers pedagogical seminaries should also be established for the purpose of exciting an interest in original investigation and of training these few and choice spirits from whose work we could promise ourselves some substantial contributions to the science and art of this subject. It would not be necessary, of course, for all who were looking forward to be teachers to take this whole course. The lectures should be so arranged that a student by attending four or five hours for a year might get some notion of the importance and relation of the work to his special department.

Many objections will be advanced to this general idea. It will be said, for example, the teacher is born, not made. A man who has the making of a teacher in him will be a good teacher without special preparation, and a poor teacher will remain a poor teacher, do what you can for him. This is the same old argument which is made to do duty on all similar occasions when it is proposed to organize any special professional instruction. It was made against the medical school, against the dental, law, veterinary, and technical school. The idea is almost absurd on the face of it, and it is with considerable difficulty that one restrains one's self sufficiently to speak in conventional language of such an argument. Of course you cannot make a good teacher out of a man who lacks all the qualities of a teacher.* Nor can you make a good preacher out of a man who

* See Appendix. Note VIII.

lacks all the elements of a preacher, nor a good lawyer or physician out of a man who is naturally fitted for neither profession; nor, to take a more striking example, a good painter or musician out of a man who has not natural talents for such callings. And yet no one would think, now-a-days, of making that any objection to theological, medical, law, painting or music schools.

Cicero answered this question in that delightful oration for the poet Archias in the passage beginning: *Quaeret quispiam Quid.*

"After all this eulogy of learning and culture, some one may ask me: How would you answer this objection, viz.: that those illustrious men whose glorious deeds are recorded in literature were not trained by this culture. Well, that is true of some, and yet I am sure of this at any rate: I will grant that there have been many men of excellent mind and great ability who without this training have been eminent and cultured by virtue of a certain native, I might almost say, divine gift and power of their own. Nay more, I will add this, that natural ability without culture is of far more importance in all weighty matters than culture without natural ability. And yet, after all, I maintain that when to excellent natural ability is superadded that sort of modification which is effected by culture, then something remarkable and altogether unique is bound to appear."

Cicero might also have added that as very few men ever possess this high order of natural ability, the problem of actual life is how to make the average man better fitted for the duties which come to him, and that such training is especially adapted to improve this medium sort, which, after all is said and done, constitutes the great majority of mankind.

This special training in the history and methods of education increases the power of the very best, who alas! are too few in number; makes the average man, who forms the great majority of all, better qualified for his work, and keeps the worst from making the grossest sort of mistakes. Just as a course in a medical school certainly improves the best man who has all the natural qualities of a good physician, improves even more the

medium man and keeps the poorest talent from actually butchering his patients from mere ignorance.

The college or university which is the first to provide really good facilities in this department, not merely nominal facilities, such as exist at one or two of our institutions already, will certainly reap a harvest which it will richly deserve.

It is a curious phenomenon of this movement that members of a college faculty have often expressed their contempt for such a plan as this in the very same meeting where in a discussion of some important topic of college pedagogics they have displayed the most astounding ignorance not only of pedagogical principles, but also of all history, even of the college system of our own country. I remember talking with one of the most prominent members of the faculty of Michigan University in regard to the establishment of such a chair in that institution. He remarked that there was no use of such a department. There was no need of such instruction in colleges. All such work should be relegated to the normal school. The very same week the college policy in regard to some of the most fundamental questions of education, was altered after a long discussion, every aspect of which was an almost purely pedagogical one. The professor showed in its course that he had never studied such topics and insisted that he did not need to do so, although he took a prominent part in the debate and thought his opinion was entited to much weight.

Before closing this paper, it is desirable to present briefly what is done in other countries in this field. As is generally known, the appointment of teachers in Prussia, is regulated by general law of the state, whether the teachers are to be appointed in private schools or public. It is also known that their system of schools is so arranged, that much of the work done in this country by our preparatory school and college is there done by one institution, viz.: the gymnasium or real school. Now, no master may be appointed to a position in any of these schools until he has passed a state examination in certain set subjects. This examination must furnish proof that the candidate has graduated from a real school or gymnasium, has pursued at the university special studies in the subjects which he pro-

poses to teach. Thus, a man who wishes to teach Greek or Latin in a gymnasium, must show that he has graduated at a gymnasium, and then studied Greek and Latin for three years at a university after graduation. All candidates are examined in Philosophy and Pedagogics. The instructions to examiners direct them to assure themselves that the candidate possesses a general knowledge of the history of Modern Pedagogics, and a familiarity with the essential elements of methods of teaching.

To give those who expect to be teachers an opportunity to prepare themselves in this subject, lectures on Pedagogics are delivered in all the universities. The Government is not content with leaving the subject here. So much is demanded of all who expect to become teachers. Special opportunities are provided for those who desire to pursue the subject further. This is done by two classes of institutions:

I. The seminaries in connection with the universities and,

II. Post-graduate seminaries on an independent basis.

It is evident, however, that the Germans are not at all satisfied even with their present opportunities. There is an active movement in favor of providing more extensive facilities showing two things; (1) that they are well satisfied with present results as a beginning, and since the new plans involve working along the old lines, and (2) that present facilities are insufficient.

In a paper by Dr. R. H. Hofmann, Professor of Pedagogics in the University of Leipzig, published in 1881, the author takes the ground that much has been accomplished, but also that much remains to be done. According to his statement, five professors lecture regularly in Pedagogics in this university, and the lectures are well attended by those who expect to become teachers in the various branches of study.

The facilities for this sort of work in England are very inadequate, being even inferior to those in our own country. In two Scotch Universities, however, Aberdeen and Edinburgh, chairs of Pedagogics have been established, and men who wish certain public positions in the school system must be examined in this branch.*

* See Appendix. *N.* IX, *British Universities and the Training of Teachers.*

In our own country, a start has already been made, which is worthy of a brief mention.

Chairs of Pedagogics, either in form or reality have been established in the Universities of Iowa, Wisconsin, Michigan, Cornell and Johns Hopkins. The work at Michigan is worthy of special notice on several accounts.

It is under the charge of an accurate scholar of long, practical experience. It extends at present over two years and embraces seven courses:

1. Practical course, discussing the art of teaching and governing, four hours per week, for one half year.

2. Theoretical and critical, four hours per week, for one half year.

3. School supervision, three hours per week, for one half year.

4. Seminary, three hours per week, for one half year.

5. History of education, three hours per week, for one half year.

6. History of education, three hours per week, for one half year.

7. Comparative study of educational systems, two hours per week, making the equivalent of ten hours per week, for one year.

The system in Michigan University, is the elective under which one subject counts for as much as another, and the extent to which those courses supplied a want, may be judged by the number of students taking courses. The growth of this attendance will also indicate the part which the offering of such facilities have in developing a want for them.

The number of students choosing the practical courses grew from 32 in 1879 to 74 in 1886, more than double.

The number in the historical courses rose from 4 in 1883, the first year in which the course was offered, to 36 in 1886. The number in the theoretical course remained nearly stationary, rising from 65 in 1879, to 70 in 1886. Of the two hundred students graduating from the college department in 1885 and 1886, eighty-three had taken one or more of these courses. The total number of different students attending all these courses rose from 72 in 1879 to 117 in 1886.

In closing this paper, let me briefly summarize and present in a slightly different form, the considerations which I have tried to emphasize.

The cause for which I plead is the establishment in connection with our colleges and universities, of ample opportunities for the professional training of teachers for our higher schools and college.

The grounds on which this is urged, are in brief, the following :

I. There is great need of such training, as is evidenced by the fact, that the average teaching in such schools is far below what it might, and should be in point of efficiency. As a class, the actual teachers in our schools are, to a large extent, men and women who are looking forward to entering some other occupation as soon as practicable, and are devoting their whole time to preparation for such work. Having given little or no attention to the study of professional questions before they begin their work, they are not compelled to do so after entering it by the example or precept of their colleagues. Looking forward to some other calling, oftentimes out of mere lack of interest in their present work, they rarely ever begin the serious study of professional questions, even where for lack of opportunity they never leave the business. It is evident that the work of such a class as this, can not be of a very high character when tried by any fair test of efficiency. It is also evident from any close examination of the work actually done. Any director or head master will tell you in close confidence, that it is very easy to get teachers, but very difficult to get good teachers. Every parent knows quite well that the really good teachers of their children are the exceptions, and they can only judge, of course, by the most superficial considerations, such as the order the teacher keeps, the hold he may succeed in getting of the boys in certain external directions, etc. There is a vastly greater number, who without giving any such signs of incompetency as would strike a parent, are doing the children untold damage by false methods and through ignorance of the simplest pedagogical principles. There are other evidences also—but it is not neces-

sary to take more time to prove what almost all will agree is the case, that much of our teaching is of a comparatively low grade.

II. It is possible to remedy this inefficiency to a considerable extent, by such a course of special training and study as can be established in connection with our colleges and universities. This is proved by the experience of Germany, of Scotland, and of certain States in our own country. Of course, we do not maintain that the completion of such course will of itself make a teacher. The study of a science will never of itself make a man capable to practice the art. But it will be of untold value, in that it makes the work intelligent, and raises it from the rank of a mere calling or handicraft to that of a fine art. It puts scientific work in the place of mere empiricism, and thus makes the possibilities of the case in the direction of good work, enormously greater. It makes the natural born teacher a much better man for the work, by really filling him with the true professional spirit, and equipping him with the latest and most approved means of doing his work. It improves the mediocre teacher, relatively speaking, to a still greater extent, and makes a passable teacher out of the most unpromising stuff. It circumscribes very much the damage which the hopelessly unfit man would otherwise do, in this most precious of all vineyards. It will tend to improve the great rank and file of teachers, just as the establishment of medical schools and dental schools, have raised the rank of the great mass of medical and dental practitioners. Indeed, I know no better comparison for the purposes of illustration than this very class of dentists. The practice of dentistry was for a long time, the merest empirical, unskilled handicraft. The dentist, was the village barber or blacksmith. So long as the business was carried on as a secondary matter by men who followed other callings as well, and who had had no other preparation for their work than what they could pick up empirically from their own experience, it was evident that there was no hope of any considerable improvement. The establishment of special schools for instruction in this art has raised it from one of the lowest of trades, to the rank of a profession. Teaching in our

higher schools and colleges has long been, at least, respectable, owing to the necessary scholarship, which even the pretense of such work requires, but it is not now and never will be a true profession, until it is fully acknowledged that to the highest form of such work, a special preparation is necessary.

III. In accordance with these views, it should now be our endeavor to secure the establishment of such professional courses in connection with our colleges and universities. Such instruction if it consisted only of courses of lectures on the history of educational doctrine and educational institutions would be exceedingly valuable, in that they would, at least, introduce the student to the general direction of educational development and progress. But in addition to these, there should be practical courses which should deal with the methods appropriate to different subjects in the different stages of school-work, and a seminary which should have for its object the encouragement of original work on the part of the members in the sphere of pedagogics, theoretical, practical and historical.

IV. The establishment of such courses would bring with them the following advantages :

1. As said before, it would offer an opportunity for the teacher to secure such preparation for his future calling, as could not but result in much more efficient work in the school-room in every direction.

2. The existence of such opportunities could not but result in attracting to the line of teaching, those who have a natural taste for such work, and who would expect to follow it as a permanent calling.

3. The natural result of this would be, that more men and women would take up this occupation as their life-work, which would mean that a long step had been taken toward making a profession of what is now only a trade.

4. The reflex action of all this would be an enormous improvement of our schools ; a great change in the social position of the school-master as such, and a corresponding change in the public estimate of the importance of good education.

5. The advantages thus far enumerated, would all accrue, even if as a result of all this work there should be no positive

additions to our knowledge of the science and art of education. But one of the chief advantages of this line of development, would be the increase in our knowledge of pedagogics, which could not but follow the establishment of such opportunities at the great centers of learning in this country. We may say now, that a very small fraction of the teachers of this country in our higher schools and colleges are giving any attention or thought to the development of the science, or to improvements in the art of education. The causes of this are various, but the most important one of all, is the utter ignorance of what is within the easy reach of any society in regard to the history of the science and art of pedagogics. Their attention has never been directed to the fact, there is here a great and largely neglected field of investigation which is peculiarly theirs, and which holds out large promises of great results if it be properly worked. The probable additions to our knowledge of the theory and art of education which would follow a successful attempt to turn the attention of great numbers of teachers to their careful snd systematic study are simply incalculable. It can only be compared to the progress in the science of medicine, of jurisprudence, of dentistry, of physics, of chemistry, which has been the outcome of making the universities the nurseries of these sciences, and to some extent, the arts belonging to them. To the higher schools of a country, the colleges and universities is entrusted the nurture of science par excellence. Theirs, the duty to receive, preserve, and increase the stock of knowledge, which is the outcome of all previous civilization and progress.

In a word, the establishment and proper equipment of these departments will contribute to the advantage of our children directly and indirectly by giving them better teachers; it will secure a better application of the money spent on education; it will give teachers a better opportunity to prepare themselves for their high calling; it will dignify their occupation and tend to raise it to the rank of a learned profession; it will further the very purpose for which our educational institutions exist; and last, but by no means least, will result in a wide extension of human science—which is itself one of the chief ends of humanity.

APPENDIX.

NOTE I.

The literature on this subject is not large, although it is in some respects important and significant. The addresses prepared by eminent specialists for particular occasions form the most valuable portion of it. The following list contains references to the most accessible portion of the literature.

1. Prof. S. S. Laurie, of Edinburgh University.—*Inaugural Address before the University on the Training of Teachers.* London, 1882.
2. J. G. Fitch, M. A. One of Her Majesty's Inspectors of Schools. Relation of the University to the Teaching Profession, in *Lectures on Teaching.* Cambridge, 1882.
3. Prof. W. H. Payne, of Michigan University.—Education as a University Study in *Contributions to the Science of Education.* New York, 1886.
4. Prof. Edward North, of Hamilton College.—*Normal Instruction in Colleges.* University of New York Regents' Reports. 1868. p. 701.
5. Dr. Thomas Hill, President of Harvard College.—*The Study of Didactics in Colleges.* Barnard's American Journal of Education. Vol. 15, p. 179.
6. *Report of Committee on the felt need of supplying pedagogical training to the students of the Colleges in the State,* made to the Convocation of the University of New York. Regents' Reports. 1882. P. 39.
7. Prof. C. V. Stoy, of the University of Jena.—Educational papers in various German periodicals.
8. Dr. Fricke, of the Waisenhaus, in Halle.—Das pädagogische Seminar. Halle, 1883.
9. Prof. E. J. James, of the University of Pennsylvania.—*The*

Higher Education of Teachers at the University of Jena. New England Journal of Education. Vol. XVIII., p. 356 and p. 372.

10. Weilingen.—*Das Pädagogische Seminar in Jena.* Jena. Gustav Fischer. 1880 (?)
11. Karl Schmidt.—*Geschichte der Pädagogik.*—Vol. IV., p. 782 and foll.
12. Mathew Arnold. *The Prussian Schoolmasters; their Training, etc.*, in Higher Schools and Universities in Germany. Macmillan & Co. 1874. Pp. 67 and especially 82 and foll.
13. Other references to the subject in the Standard German Histories of Education. Reports of Discussions in Schoolmasters' Associations and Conventions given in the Educational periodicals, particularly the *London Journal of Education, Die Allgemeine Schulzeitung, etc.*
14. Wiese. Verordnungen und Gesetze für die Höheren Schulen in Preussen. 1864–'74.
15. Illinois School Journal. Normal. Illinois. Vols. I & II.
16. Herbert Spencer. Essays on Education. New York, 1881.

NOTE II.

The great function of a University is to teach; and to supply the world with its teachers. The very title of Doctor which marks the highest academic distinction in each of the faculties implies that the holder is qualified to teach the art he knows. And if the experience of these later times has brought home to us the conviction that the art of communicating knowledge, of rendering it attractive to a learner, is an art which has its own laws and special philosphy: it is surely fitting that a great University, the bountiful mother whose special office it is to care alike for all the bases of human culture and to assign to all arts and sciences their true place and relation, should fill an honored place for the master science, a science which is so closely allied to all else which she teaches—the science of teaching itself.

J. G. Fitchs' "Lectures on Teaching." Chapter I.

NOTE III.

Whatever objections may be made to Normal Schools there is no use of shutting our eyes to the fact that their graduates have succeeded in getting hold of many of the most prominent situations in our educational system in competition with college graduates. No one would think of maintaining that the curriculum of the average normal school is to be compared with that of a college so far as its scholarship or culture value is concerned. The only ground, then, on which we can account for the growing preponderance of normal school graduates in positions for which their curriculum scarcely fits them, is that the advantage which they enjoy from their technical training gives them a start which the college man in the time which he devotes to teaching as a rule, can not overtake.

An eminent educator in the State of New York said more than twenty years ago:

"The great deficiency of college graduates is ignorance of the methods of instruction now adopted in our better schools and ignorance of school discipline and management. The work these graduates are called upon to perform is entirely different from that of the professors who have made the last and perhaps strongest impression upon them, and whose methods they are unsconsciously inclined to imitate. College work is far from fitting students for acadamic teaching. Often it unfits them by substituting the more recent impression of college class work for those of the preparatory school from which they came. College graduates are superior in culture and general knowledge but deficient in technical skill. Unless our colleges do something toward preparing teachers, a large part of the work of academic teaching must go into the hands of females."

What was foretold has come to pass. The proportion of females in the teaching body of these schools has steadily increased and they are almost without exception normal school pupils. Of course this is not the only cause of this substitution, but it has been undoubtedly a contributing cause. The superintendent of a system of city schools, in conversing with the writer about the choice of assistant teachers in the city high

school, said that for all positions which they could at all fill he preferred normal school graduates to college graduates. "Neither class remain very long with us if they are really able, and the normal school men have the great advantage that they can begin from the very first hour and attain a fair degree of success, while the college men, if fresh from college, flounder around in the most helpless way, and require two to three years to become as efficient as the normal school men are when they begin. Of course if they were to remain for a long series of years this difference would disappear and the culture of the college would tell in the long run, but as it is, the men for us are the normal school men wherever they can teach the subjects at all."

A similar though by no means so marked difference is observed in Germany in favor of the technical training of the normal school graduate as compared with the average teacher in the gymnasium; for although the latter has had a training in this respect much superior to our college men, yet it is still very inferior to that of the Normal School graduate.

No one can doubt, who has taken any pains whatever to institute extended comparisons, that the teaching in our elementary schools is much better on the average than that in the secondary school and college, and that the teachers in the former come much nearer realizing the ends which they set before them than those in the latter. Those ends are oftentimes not the highest, as we should expect from the culture of the teachers, but they are kept clearly in view and pursued with a system and determination which results in as high a degree of success as is possible under the circumstances.

There is no doubt that so-called secondary and higher education have much to learn in this respect from elementary work.

NOTE IV.

"Young men who intend to engage in the work of higher instruction need careful training before entering thereon, both in the fundamental principles of the profession and also in its technique; because first: good teaching and successful school

management is an art which must be learned either by careful and definite previous instruction or by school room experiments of which pupils are the subjects and too often the victims; because, second, the teachers in academies and high schools are teachers of teachers and become the models after which many teachers of common schools shape their methods: third, a large percentage of the teachers in our higher schools continue in the employment but a few years at best, and have no time therefore to waste in a school room apprenticeship, too often disastrous; because, fourth, the chances for a permanent continuance in the profession of desirable young men would be largely increased if the first steps in it could be made pleasant and successful by careful previous instruction and because, fifth, in the language of President Hill, there is a sense in which Didactics may be called a liberal study; it is that every student may be considered prospectively as the head of a family, and that therefore the art of teaching is of universal utility—a view which has been urged with great force and cogency by Herbert Spencer, who adds in conclusion: "the subject which involves all other subjects and therefore the subject in which the education of every one should culminate is the theory and practice of teaching."

Report of Committee of Convocation of University of New York. Regent's Report, 1883.

"If there is a philosophy of education and an art of teaching, they are as applicable to the advanced departments of instruction as to the elementary. The teachers of academies as much need systematic education into the best methods of their duties as do the teachers of the common schools into those peculiar to them. Many a lad after he has completed his elementary education has had his taste for study absolutely destroyed and his scholarship ruined by an unskillful teacher."

Regent's Report for 1867, *p. xx.*

NOTE V.

The proposition has often been made that this training should be given in special post-graduate schools. Thus President Hill of Harvard College, in the address referred to in Note

1, said that Normal Schools should be attached to our Universities, and bachelors of art who intend to teach should be urged first to take one or two year's special instruction in the art of teaching. The committee which reported on this subject to the Convocation of the University of New York in 1881, (Regent's Report for 1882, p. 346,) remarked that such a school would in the present state of our education be too likely to repeat the experience of the French Ecole Normal, which after being twice closed on account of insufficient patronage, did not secure a firm foothold until after thirty-six years of vicissitudes. We may add that it does not even now correspond to such an institution as President Hill proposed. The various philogical seminaries in the German Universities are in so far pedagogical seminaries as that they are intended for the special benefit of those who expect to become teachers, but their attention is almost entirely confined to developing a sound scholarship in philology, and but little effort is devoted to studying padagogy in any but this indirect form. The post-graduate pedagogical seminaries in Prussia, although they have done a good work, do not at all answer the purposes which can be attained by the system proposed in this paper. As a matter of fact, only the merest fraction of those who hold the higher positions in the gymnasia or real schools have ever been in these seminaries at all. The reasons why such institutions are not likely to succeed are numerous and of force in all countries alike.

NOTE VI.

It is not good that this science, or indeed that any other science should be mainly pursued per se, in separate training institutions or professional colleges where the horizon is necessarily bounded, and where everything is learned with a special view to the future necessities of the class-room scholar. It is to the Universities that the power is given in the highest degree of co-ordinating the various forms of preparation for the business of life; of seeing in due proportion the study and the practice the art and science, the intellectual efforts which make the man as well as those which make the lawyer or divine. It

is to the Universities that the public should look for these influences which will prevent the nobler professions from degenerating into crafts and trades. And if the schoolmaster is to become something more than a mere pedant, to know the rules and formulæ of his art and at the same time estimate them at their true value, it is to the University that he must look for his guidance, and it is from the University that he should seek in due time the attestation of his qualifications as a teacher, because that is the authority which can testify that he is not merely a teacher, but a teacher and something else.

J. G. Fitchs' "Lectures on Teaching." Chap. I.

NOTE VII.

BRITISH UNIVERSITIES AND THE TRAINING OF TEACHERS.

There is no professorship of education at any University of England, Wales, or Ireland. At the Universities of Cambridge and London there are special examinations for teachers, on the results of which certificates or diplomas are granted; but there are no educational degrees. Technically speaking, therefore, education is not a university subject in these countries. At Cambridge, under the auspices of a teachers' training syndicate appointed by the university early in 1879, lectures on teaching have been given for eight years past; but they are not permanently established, and may come to an end at any time. They are, as a rule, fitfully and poorly attended, and cannot as yet be pronounced a decided success. Except in the training colleges and at the College of Preceptors, there is no other systematic course of lectures for teachers outside Scotland. In Scotland there are two chairs of education, established in 1876 out of funds left by the well-known Dr. Bell, one at Edinburgh, and the other at St. Andrew's. Both these chairs are very ill endowed. In 1886 a school-masters' diploma was established at the University of Edinburgh.

I shall endeavor in the space at my disposal to describe what is actually being done for the training of teachers by these various agencies.

I will begin with Cambridge, and first as to its courses of lectures. They usually consist of one set on psychology in its bearing on teaching, delivered as a rule by Mr. James Ward of Trinity College; another set on the history of education ; and a series of disconnected lectures on practice delivered by prominent head masters and other teachers. Amongst these last may be mentioned as specially valuable the lectures on stimulus and on discipline, by Mr. Arthur Sidgwick, formerly an assistant master at Rugby; and one on 'A Day in a Class-Room,' by Dr. Abbott, head master of the City of London School. As far as I know, only one connected course of lectures on the practice of education has ever been delivered before the university ; viz., that by Mr. Fitch, which has since appeared as his well-known 'Lectures on Teaching.' It may well be doubted whether the sporadic lectures by eminent school-masters above referred to can be properly said to form a part of training in any real sense; but they are certainly more attractive than a prolonged course, and are in many ways suggestive and stimulative. The reasons why these lectures as a whole are not more satisfactorily attended are mainly two,—first, because under-graduates, while reading for their degrees, have very little time to devote to other subjects ; and, second, because it is the habit at our universities to look upon lectures as merely preparation for examinations, and to value examinations solely by the prizes attached to them. Now, there are no prizes attached to the teacher's examinations and the head masters of our public schools practically ignore them altogether, while the University Agency for the supply of masters does not even mention the certificates on its form of qualifications. It is no wonder, therefore, that undergraduates do not crowd the lecture room. It is only fair, however, to state that the lectures on education suffer no more than others under similar drawbacks. The writer of this paper, when lecturing at Cambridge a short while ago, on the history of education, can remember on one occasion to have counted as many as seventeen undergraduates present. At the time there were about nineteen hundred undergraduates at the university, of whom perhaps one-quarter were destined to become school masters, at least for a time.

Before a candidate can enter for the examination of the Cambridge Teachers' Training Syndicate, he or she must have given evidence of something of the nature of a sound general education. The test is not, as at London and Edinburgh, that the candidate must be a graduate of the university. Some nine fairly simple examinations are named, one of which must have been passed; or, to make the condition still more elastic, the candidate must have "been presented for examination by a training-college approved by the syndicate." This lowering of the initial test, no doubt, still further removes education from the status of a university subject; but it renders the examination far more widely available, especially for women, who form about nine-tenths of the candidates as a rule. In the examination of June, 1886, held at the three centres, Cambridge, London, and Cheltenham, fifty-one candidates passed, of whom only three were men (students of the Finsbury Training-College). There are two certificates granted,—one for the theory, history, and practice of teaching; and, where this has been won, another may be obtained for practical efficiency in teaching. The subjects for the former are:—(1) The theory of education: (*a*) the scientific basis of the art of education, or pure psychology; (*b*) the elements of the art of education, or the application of psychology to school-work in the training of the faculties (the senses, memory, conception, etc). (2) The history of education in Europe since the revival of learning, a general knowledge being required of systems of education which have actually existed, of the work of eminent teachers, and of the theories of leading writers on education up to the present time. A more detailed knowledge is required of special subjects set from year to year. For example, the special subjects for 1887 are, 'John Amos Comenius, his Life and Educational Works,' by Professor Laurie, and 'The Life and Work of Arnold;' those for 1888 will be 'Locke's Thoughts concerning Education,' and 'The Teaching of the Jansenists at Port Royal.' (3) The practice of education; (*a*) method, which deals with actual teaching and examination; (*b*) school management, which deals with hygiene, furniture, apparatus, time-tables, etc. One paper is set on each of three groups of subjects; and a fourth paper is

added, containing a small number of questions of an advanced character on each of the three groups. It is into this paper that questions on physiology and physical training are usually introduced ; but, notwithstanding this, I cannot but think that these last-named subjects are not sufficiently represented. Candidates must be twenty years old before entering for the examination, and must pay a fee of fifty shillings to the syndicate.

The certificate for practical efficiency, as I have pointed out, can only be obtained by those who already hold the certificate which I have just described. Candidates must "have been engaged in school-work for a year in some school or schools recognized for the purpose by the syndicate." Training-colleges of course come under this designation, "if the syndicate is satisfied with the duration and character of the training in practical work received by the candidates." The bases for the certificate are, (*a*) examination of the class taught by the candidate; (*b*) an inspection of the class while being taught; (*c*) questions put to the teacher in private after the inspection ; and (*d*) a report made by the head master or mistress. I do not think there have been many candidates for this certificate other than the students of those few training-colleges which are established for teachers of middle and higher schools. But then they are almost the only people who use the examination at all.

It may be as well to mention here that the syndicate does not prescribe the use of any particular books for its examination, except those mentioned under the head of 'special subjects.' Mr. Ward has, however, from time to time put forth a list of some of those books which may be safely recommended to students, and from which they can make their own choice. I need scarcely say that Dr. Barnard's admirable compilations play a prominent part in this list.

I have given a very full description of the Cambridge scheme, both because I consider it, on the whole, the best unconnected with a training-college in Great Britain, and because by so doing I shall be saved the trouble of entering into such minute detail again. Let me mention here, for the information of the curious in such matters, that in the charter of Cavendish College, founded at Cambridge in 1876, the objects mentioned

are, "(1) To enable students somewhat younger than ordinary undergraduates to pass through a university course, and obtain a university degree; (2) To train in the art of teaching those students who intend to become schoolmasters; (3) To secure the greatest possible economy in cost as well as time." I can not ascertain that any steps have ever been taken to realize the second object. Probably all that was meant was that the college was intended to provide 'pupil-teachers' in the elementary schools, with an opportunity for finishing their general education. Who knows but that some day we may get it to mean both that and something more?

For the present, the only part the University of London can play in the higher training of teachers is that of an examiner. As I have already said, it possesses an 'examination in the art, theory, and history of teaching.' Unlike the University of Cambridge, it restricts its examination to its own graduates, and it grants a 'teacher's diploma' on the result. There is no restriction as to age, and the fee is five pounds. Four papers are set,—one on 'mental and moral science in their relation to the work of teaching;' two on 'methods of teaching and school management;' and one on 'the history of education.' The science and the methods are very much the same as at Cambridge; but the history consists solely of set books. It is described as "the lives and work of eminent teachers, and the systems of instruction adopted in foreign countries." The set books for 1887 are as follows: 'History of the University of Cambridge from the Earliest Times to 1535 A. D.' by Bass Mullinger; 'Education and School,' 'Theory and Practice of Teaching,' by E. Thring; 'On the Action of Examinations,' by Latham; 'Quelqes mots sur l'Instruction publique en France,' by Michael Breal.

There are no doubt great advantages in the direction of definiteness and thoroughness to be derived from the use of set books; but, on the other hand, it leads to this unsatisfactory position,—that in 1887 teachers will gain their diploma without having shown any particular knowledge of the public instruction of England, Germany, and Switzerland, and what is worse, without having shown any particular knowledge of the theories and

methods of Frœbel and Pestalozzi. As a matter of fact, one or two questions on these last are generally introduced into the other papers. It may be well to note that among the many things coming under the head of methods of teaching and school management we find mentioned physical exercises, drill, and recreation. But there is another point of still greater importance. The University of London grants but one certificate, —not two, as does Cambridge,—and includes in that one, as a *sine qua non*, practical skill in teaching and in the management of a class. No directions are given as to how this last and most difficult test is to be applied. But hitherto the plan adopted has been to require the candidates to send in sketches of lessons on four different subjects chosen by themselves, and to give one or two of these lessons to a class in the presence of the examiners But inasmuch as, in the necessity of things, such classes as can be got near at hand have to be chosen, the teachers know nothing personally of the children, and are quite in the dark as to the actual knowledge which the class possesses. The consequence is, that the test is far from satisfactory, and merely serves to show what a teacher will do under very distressing circumstances. At the best, it can only reveal whether a teacher is altogether incompetent; all the higher qualities must remain unassessed. A large part of those who take degrees at the University of London are the teachers of elementary and middle schools; and these, by the time they have graduated, have already had many years of school experience; hence the insistence on the practical test as an integral part of the London examination for teachers. The Cambridge examination is rather designed for those who intend to become school-masters and school-mistresses. The London examination has only been in existence some three or four years, and so far has been but very little made use of.

As I said at the commencement, there are two chairs of pedagogy in Scotland,—one at the University of Edinburgh, and the other at the University of St. Andrew's. Their work is sufficiently alike to allow one description to do for both. I will choose the chair of Edinburgh, held by Prof. S. S. Laurie.*

*The chair at St. Andrew's is held by Prof. J. M. D. Meiklejohn, whose name and work must be well known in the United States.

This chair was founded in 1876, and commenced work with fourteen students,—a number which has steadily been added to, until the total has now reached fifty-one. Of these students, about three-fifths are 'senior students' of the denominational training-colleges, who, having passed a qualifying examination in Latin and mathematics, and stood in the first division of the government list of successful candidates for Queen's scholarships (i.e., entrance scholarships at the training-colleges), are allowed to attend the university. The remainder are students who have graduated or are about to graduate. This latter class will not be likely to attend in larger numbers until either the subject of education is included in the studies qualifying for an M. A. degree, or an act is passed requiring all school-masters in Scotland above the elementary grade to hold a diploma in education. A long course of eighty-five lectures is delivered between the first of November and the first of April. Of these lectures, about a dozen are purely psychological, dealing with the intelligence and moral nature; fifty are on method, dealing with principles of teaching and the detailed application of these; the rect on the history of education. These last naturally vary considerably from year to year; but every year a careful analysis of Quintilian and Locke is given. I must confess that the choice of these two last as staple subjects seems to me peculiar. All the students attend three examinations, and write three essays. These form the subject of professorial criticism. Those students who have not been, or who are not, training-college students practice the art of teaching in the normal schools (by permission), and are examined by the head masters of those schools on practical matters of school management. The head masters report to the professor. Last year the university instituted a school-masters' diploma specially for secondary sehool-masters, which, however, is to be conferred only on graduates in arts of Edinburgh. Candidates, moreover, must have attended the class of the theory, art, and history of education in the university, and must pass an examination in these subjects conducted by the professor and an examiner appointed by the university court. The subjects of examination in April, 1887, were, (*a*) the professor's lectures; (*b*) Locke,

L. of C.

'On the Conduct of the Human Understanding;' (*c*) Milton, 'Tractate on Education;' (*d*) Comenius, 'Great Didactic.' Each candidate must further give evidence either that he has attended a course of practical instruction in a training-college; or that he possesses the government qualification in the practice of teaching required of graduates and provided in the 'Scottish Code;' or that he has taught publicly for at least one year in a school, and holds such a certificate of practical skill from the head master as may be considered satisfactory by the university. Lastly, each candidate must satisfy the university of his practical aptitude as a teacher in some special subject or subjects in which he has received instruction in the university or in any institution recognized by the university as qualifying for degrees. I may note in conclusion that the fee for the diploma is two guineas. I have not yet been able to ascertain whether St. Andrew's is likely to follow the lead of Edinburgh in instituting a school-masters' diploma.

It only remains for me to speak of the College of Preceptors in London. This institution provides three courses of evening lectures for teachers, and confers diplomas of three grades,—associateship, licentiateship, and fellowship. The lectures are on (*a*) psychology and its relation to teaching; (*b*) practical teaching; and (*c*) the history of education. The courses used to consist of ten lectures each; but in future the number of lectures on the first two subjects will be doubled. They are open free to all members of the college (annual subscription one guinea), or to any one else on payment of half a guinea for each course.

The examination for the three kinds of diploma all include tests of a general education of gradually increasing severity; but these tests may be omitted in the cases of persons possessing a university degree, or who have passed some examination equally satisfactory to the college. What most concerns us here are the strictly pedagogic subjects. To begin, then, with the associateship. Candidates must give evidence of having been at least one year engaged in teaching, or of having attended a year's course of the lectures for teachers at the college. The subjects are, (1) the elements of mental and moral science; (2)

physiology, with special reference to its application to the laws of health and to physical and mental education; and (3) lesson-giving and criticism of methods, including the sketching of a lesson on some assigned subject, the suggesting and discussing of cases of difficulty in teaching and discipline, and the proposing and criticising of methods. For the licentiateship the candidates must give evidence of having been at least two years engaged in teaching. The subjects are the same as for the associateship, with the addition of logic in its application to education; while the third section now includes "a thesis on the life, character, methods, and influence of some distinguished educator to be selected by the candidate, or a description of the organization and methods of some school of repute derived from personal inspection and examination." The candidates for the fellowship must give evidence of having been not less than five years engaged in teaching. Sections No. 1 and No. 2 are the same as before, but of a more advanced character. Section 3 becomes "government of a school, including lesson-giving and school organization in all its departments." Section 4 is "the history of education and educational methods, with studies of distinguished educators, English and foreign; and a description and discussion of the methods and organization of schools and colleges of note at home and abroad." The fees in the first case, for examination and diploma together, are two guineas; in the second, three guineas; and in the third, six guineas. Examinations are held twice a year,—at midsummer and Christmas. During 1886, for the three diplomas together, 136 candidates entered,—70 men and 66 women. Of these, 45 obtained associateship, 4 the licentiateship, and 1 the fellowship. This will serve to show both how much the examinations are used, and the severity observed in awarding the diplomas.

H. Courthope Bowen.

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THE FOLLOWING IS A LIST OF THE PAPERS READ BEFORE THE ASSOCIATION.

Those Marked * out of Print. † Not Printed.

1871. *Compulsory Education.* By Lorin Blodget. *
Arbitration as a Remedy for Strikes. By Eckley B. Coxe. *
The Revised Statutes of Pennsylvania. By R. C. McMurtrie. *
Local Taxation. By Thomas Cochran. *
Infant Mortality. By Dr. J. S. Parry.

1872. *Statute Law and Common Law, and the Proposed Revision in Pennsylvania.* By E. Spencer Miller. †
Apprenticeship. By James S. Whitney.
The Proposed Amendments to the Constitution of Pennsylvania. By Francis Jordan.
Vaccination. By Dr. J. S. Parry. *
The Census. By Lorin Blodget. *

1873. *The Tax System of Pennsylvania.* By Cyrus Elder. *
The Work of the Constitutional Convention. By A. Sydney Biddle.
What shall Philadelphia do with its Paupers? By Dr. Isaac Ray.
Proportional Representation. By S. Dana Horton. *
Statistics Relating to the Births, Deaths, Marriages, etc., in Philadelphia. By John Stockton-Hough, M. D.
On the Value of Real Scientific Research. By Dr. Ruschenberger.
On the Relative Influence of City and Country Life, on Morality, Health, Fecundity, Longevity and Mortality. By John Stockton-Hough, M. D.

1874. *The Public School System of Philadelphia.* By James S. Whitney.
The Utility of Government Geological Surveys. Professor J. P. Lesley.
The Law of Partnership. By J. G. Rosengarten. *
Methods of Valuation of Real Estate for Taxation. By Thomas Cochran.
The Merits of Cremation. By Persifor Frazer, Jr.
Outlines of Penology. By Joseph R. Chandler.

1875. *Brain Disease and Modern Living.* By Dr. Isaac Ray. †
Hygiene of the Eye, Considered with Reference to the Children in our Schools. By Dr. F. D. Castle.
The Relative Morals of City and Country. By William S. Pierce.
Silk Culture and Home Industry. By Dr. Samuel Chamberlaine.
Mind Reading, etc. By Persifor Frazer, Jr.
Legal Status of Married Women in Pennsylvania. By N. D. Miller.
The Revised Status of the United States. By Lorin Blodget.

1876. *Training Nurses for the Sick.* By John H. Packard, M. D.
The Advantages of the Co-operative Feature of Building Associations. By Edmund Wrigley.
The Operations of our Building Associations. By Joseph I. Doran.
Wisdom in Charity. By Rev. Charles G. Ames. *

1877. *Free Coinage and a Self-Adjusting Ratio.* By Thomas Balch.
Building Systems for Great Cities. By Lorin Blodget.
Metric System. By Persifor Frazer, Jr.

1878. *Cause and Cure of Hard Times.* By R. J. Wright.
House-Drainage and Sewerage. By George E. Waring, Jr.
A Plea for a State Board of Health. By Benjamin Lee, M. D.
The Germ Theory of Disease, and its Present Bearing upon Public and Personal Hygiene. By Joseph G. Richardson, M. D.

1879. *Delusive Methods of Municipal Financiering.* By William F. Ford. †
Technical Education. By A. C. Rembaugh, M. D.
The English Methods of Legislation Compared with the American. By S. Sterne.

1879. *Thoughts on the Labor Question.* By Rev. D. O. Kellogg.
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Notes on Reform Schools. By J. G. Rosengarten. *
1880. *Philadelphia Charity Organization.* By Rev. Wm. H. Hodge.
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Defeat of Party Despotism. By Rev. Dr. Leonard W. Bacon. †
Land and Individualism. By Kemper Bocock. †
1887. *Chairs of Pedagogics in our Universities.* By Edmund J. James, Ph. D.

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